

## NORLITE CORPORATION

628 SO. SARATOGA STREET PO BOX 684 COHOES, NY 12047 PHONE: (518) 235-0401 FAX: (518) 235-0233

October 10, 2012

Karen M. Gaidasz, CPESC
Environmental Analyst
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014
RETURN RECE

RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng Air Compliance Branch United States Environmental Protection Agency Region 2 290 Broadway

New York, NY 10007-1866 RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedance Report

Kiln 1: 10/17/12- 10/24/12 Kiln 2: 10/17/12- 10/24/12

Dear Sirs:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite Corporation (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 10/17/12 thru 10/24/12. The attached document explains each of the "malfunctions" for Kiln One and Two.

The results of the investigation concluded a majority of the exceedances were a result of the 1 second time delay cutoff limit of -0.00 inches of water column associated with the negative backend chamber pressure. A large portion of the cutoffs were associated with the pressure reference tube being partially plugged with a bee nest. It took two separate attempts to remove the entire bee nest from the pressure reference tube. With the tube being partially plugged, the differential pressure was inaccurate and contributing to Rear Chamber Cutoffs. Another large portion of the cutoffs were associated with controlling LGF Flow with valves and having high LGF Line pressure. The high LGF line pressure made finite control with the valve very difficult. Most of the cutoffs were results of a pressure pulse in the kiln system which was a result of a sudden LGF fuel surge caused by minute valve changes.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

DCL: 2410



## NORLITE CORPORATION

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tvanvranken@norlitecorp.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken Environmental Manager Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments

James Lansing, NYSDEC – CO w/attachments Joe Hadersbeck, NYSDEC – R4w/attachments Tita LaGrimas, Tradebe w/attachments

DCL: 2410



## NORLITE CORPORATION MACT EXCEEDANCE REPORT - KILN 1

10/17/12 - 10/24/12

Start Date	Start Time	End Date	<b>End Time</b>	Downtime	#	Event	Cause	Parameter	Limit	<b>Corrective Action</b>
							The Kiln Operator was Controlling LGF Fuel Flow			
							with Valves and High LGF Line Pressure Which			
							Caused a Fuel Flow Surge Triggering the Upper			
							Instrument Setpoint to be Reached for LGF Flow			
10/23/2012	14:58:20	10/23/2012	14:59:02	0:00:42	156	Malfunction	Span	LGF Flow	OPL	Adjusted Fuel Flow



## NORLITE CORPORATION MACT EXCEEDNACE REPORT - KILN 2 10/17/12 - 10/24/12

Start Date	Start Time	End Date	<b>End Time</b>	Downtime	#	Event	Cause	Parameter	Limit	<b>Corrective Action</b>
10/17/2012	19:44:32	10/17/2012	19:45:49	0:01:17	350	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
10/18/2012	5:49:53	10/18/2012	5:50:19	0:00:26	351	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
10/18/2012	6:32:02	10/18/2012	6:32:28	0:00:26	352	Malfunction	The Kiln Operator was Attempting to Reintroduce LGF By Using Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
10/19/2012	16:01:37	10/19/2012	16:18:50	0:17:13	353	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
10/20/2012	2:30:46	10/20/2012	2:31:26	0:00:40	354	Malfunction	The LGF Flow Was Intermittent Which Caused a Pressure Pulse to Occur in the Kiln. The Intermittent Flow Was Most Likely Due to The Kiln Operator Controlling LGF Fuel Flow With Valves and High LGF Line Pressure/No Visible Emissions		Opl	Adjusted LGF Line Pressure and LGF Flow
10/20/2012	2:55:24	10/20/2012	3:12:47	0:17:23	355	Malfunction	A Stack Gas Cutoff Occurred Which Caused A Loss In LGF Flow Which Triggered a Pressure Pulse In the Kiln System Which Affected the Rear Chamber System/No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted Stack Gas Flow and Fuel Flow
10/21/2012	4:24:32	10/21/2012	4:25:28	0:00:56	356	Malfunction	The Differential Pressure in the Rear Chamber System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially Plugged Pressure Reference Tube.	Back Chamber Pressure, 1 Second Delay	Opl	Cleared Plugged Pressure Reference Tube
10/21/2012	9:04:25	10/21/2012	9:05:51	0:01:26	357	Malfunction	The Differential Pressure in the Rear Chamber System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially Plugged Pressure Reference Tube.	Back Chamber Pressure, 1 Second Delay	Opl	Cleared Plugged Pressure Reference Tube

10/21/2012	10:56:31	10/21/2012	10:57:21	0:00:50	358	Malfunction	The Differential Pressure in the Rear Chamber System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially Plugged Pressure Reference Tube.	Back Chamber Pressure, 1 Second Delay	Opl	Cleared Plugged Pressure Reference Tube
10/21/2012	11:00:20	10/21/2012	11:03:08	0:02:48	359	Malfunction	The Differential Pressure in the Rear Chamber System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially Plugged Pressure Reference Tube.	Back Chamber Pressure, 1 Second Delay	Opl	Cleared Plugged Pressure Reference Tube
10/22/2012	10:32:58	10/22/2012	10:33:28	0:00:30	360	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
10/22/2012	10:45:55	10/22/2012	10:47:03	0:01:08	361	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
10/22/2012 10/22/2012	10:49:07 12:14:17	10/22/2012	12:00:14 12:14:49	1:11:07 0:00:32	362 363	Malfunction Malfunction	A Stack Gas Cutoff Occurred Which Caused A Loss In LGF Flow Which Triggered a Pressure Pulse In the Kiln System Which Affected the Rear Chamber System/No Visible Emissions/High CO's Instantaneous Upper Instrument Setpoint Reached for Scrubber Recirc. Rate	Back Chamber Pressure, 1 Second Delay Scrubber Recirc. Rate	Opl Span	Adjusted Stack Gas Flow and Fuel Flow Adjusted Scrubber Recirc. Rate
10/23/2012	18:50:18	10/23/2012	18:50:36	0:00:18	364	Malfunction	The Differential Pressure in the Rear Chamber System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially Plugged Pressure Reference Tube.	Back Chamber Pressure, 1 Second Delay	Opl	Cleared Plugged Pressure Reference Tube
10/23/2012	18:58:54	10/23/2012	18:59:12	0:00:18	365	Malfunction	The Differential Pressure in the Rear Chamber System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially Plugged Pressure Reference Tube.	Back Chamber Pressure, 1 Second Delay	Opl	Cleared Plugged Pressure Reference Tube
10/23/2012	19:55:08	10/23/2012	19:55:39	0:00:31	366	Malfunction	System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially Plugged Pressure Reference Tube. The Differential Pressure in the Rear Chamber	Back Chamber Pressure, 1 Second Delay	Opl	Cleared Plugged Pressure Reference Tube
10/23/2012	20:14:26	10/23/2012	20:14:49	0:00:23	367	Malfunction	System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially Plugged Pressure Reference Tube.	Back Chamber Pressure, 1 Second Delay	Opl	Cleared Plugged Pressure Reference Tube

The Differential Pressure in the Rear Chamber System Started Fluctuating Which Caused The Automated Valve to Start Opening and Closing. The Fluctuating Pressure Was Caused By A Partially

Back Chamber Pressure,

Cleared Plugged Pressure

10/23/2012 20:43:55 10/22/2012 20:44:18

0:00:23

368 Malfunction

Plugged Pressure Reference Tube.

1 Second Delay

Opl

Reference Tube